

Appl. No.: 09/918,617
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Off. Act. Dated: 07/21/04

Amendments to the Claims:

Please amend claims 1, 12, 15, 23, 25 and 27. Please add new claims 29-31. This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended): An apparatus for impressing a three-dimensional pattern into a wet concrete wall formed by a slip form, comprising:
an impression roller having an axis of rotation and an outer periphery impressed with a three-dimensional pattern;
means for supporting said roller for rotation about said axis with said outer periphery being partially depressed into an exposed side surface of the wet concrete wall emerging from the slip form, said axis of said roller being maintained substantially parallel to the exposed surface; and
means for supporting said roller for advancement along the concrete wall, whereby surface engagement between said outer periphery of said impression roller and the exposed surface of the wet concrete cause said roller to rotate and impress successive portions of the wet concrete with successive portions of said three-dimensional pattern.
2. (previously presented): An apparatus as recited in claim 1, wherein said roller is elongated and right-circular cylindrical in configuration.
3. (withdrawn): An apparatus as recited in claim 1, wherein said roller is elongated has a two-stage outer periphery, a first stage being right-circular cylindrical in configuration and a second stage being frusto-conical in configuration.

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4. (previously presented): An apparatus as recited in claim 1, wherein said outer periphery is made from a curable silicon, and in which said impression roller includes a rigid inner form having an outer surface, and in which said outer periphery substantially covers said outer surface.

5. (previously presented): An apparatus as recited in claim 1, wherein said means for supporting said roller for rotation comprises upper and lower arms rotatably attached to a respective upper and a respective lower end of said impression roller, said arms extending from said means for supporting said roller for advancement.

6. (previously presented): An apparatus as recited in claim 1, further comprising means for applying a release agent on the wet concrete before it comes into contact with said outer periphery.

7. (withdrawn): An apparatus as recited in claim 6, wherein said means for applying a release agent comprises a spray bar extending along said outer coating.

8. (previously presented): An apparatus as recited in claim 1, further comprising means for applying a thin plastic film on the wet concrete before it comes into contact with said outer periphery.

Claims 9-11 (canceled)

12. (previously presented): An apparatus for impressing a three-dimensional pattern into wet concrete formed by a slip form, comprising:

an impression roller, said roller having an axis of rotation and an outer periphery, at least a portion of said outer periphery including an outer layer of material having an outwardly facing pattern side, impressed with a three-dimensional pattern;

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means for supporting said roller for rotation about said axis with said outer layer being partially depressed into an exposed side surface of the wet concrete wall just emerging from the slip form, said axis of said roller being substantially parallel to the exposed surface; and

means for supporting said roller for advancement along the concrete wall, whereby surface engagement between said outer periphery of said impression roller and the exposed surface of the wet concrete cause said roller to rotate and impress successive portions of the exposed surface with said three-dimensional pattern.

13. (previously presented): An apparatus as recited in claim 12, wherein said roller is elongated and right-circular cylindrical in configuration.

14. (withdrawn): An apparatus as recited in claim 12, wherein said roller is elongated has a two-stage outer periphery, a first stage being right-circular cylindrical in configuration and a second stage being frusto-conical in configuration.

15. (currently amended): An apparatus as recited in claim 12, wherein said outer layer is made from a curable silicon, and in which said impression roller includes **[[an]]** a rigid inner form having an outer surface, and in which said outer layer substantially covers said outer surface.

16. (previously presented): An apparatus as recited in claim 12, wherein said means for supporting said roller for rotation comprises upper and lower arms rotatably attached to a respective upper and a respective lower end of said impression roller, said arms extending from said means for supporting said roller for advancement.

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17. (previously presented): An apparatus as recited in claim 12, further comprising means for applying a release agent on the wet concrete, before it comes into contact with said outer periphery.

18. (withdrawn): An apparatus as recited in claim 17, wherein said means for applying a release agent comprises a spray bar extending along said outer coating.

19. ((previously presented): An apparatus as recited in claim 12, further comprising means for applying a thin plastic film on the wet concrete before it comes into contact with said outer periphery.

Claims 20-22 (canceled)

23. (currently amended): An apparatus for slip-forming a concrete wall and impressing a three-dimensional pattern into an exposed surface of the wall, comprising:
an impression roller having an axis of rotation and an outer periphery impressed with a three-dimensional pattern; and

means for supporting said roller for rotation about said axis with said outer periphery being partially depressed into an exposed side surface of the wet concrete wall emerging from said a slip form assembly at a discharge end, said axis of said roller being substantially parallel to the exposed surface;

wherein said roller moves at the same speed and in the same direction as the forward advancement of [[a]] said slip form assembly, whereby surface engagement between said outer periphery of said impression roller and the exposed surface of the wet concrete cause said roller to rotate and impress successive portions of the concrete with said three-dimensional pattern.

Claim 24 (canceled)

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25. (currently amended): An apparatus for impressing a three-dimensional pattern into a wet concrete wall formed by a slip form, comprising:

- an impression roller having an axis of rotation and an outer periphery, at least a portion of said outer periphery impressed with a three-dimensional pattern;
- upper and lower arms rotatably attached to a respective upper and a respective lower end of said impression roller;
- said arms extending from a support frame;
- said support frame configured for coupling to a slip form machine;
- said arms configured to support said roller for rotation about said axis with said outer periphery being partially depressed into [[an]] a first exposed side surface of the wet concrete wall emerging from said slip form, said axis of said roller being maintained substantially parallel to the exposed surface;
- whereby surface engagement between said outer periphery of said impression roller and the exposed surface of the wet concrete cause said roller to rotate and impress successive portions of the wet concrete with successive portions of said three-dimensional pattern.

26. (previously presented): An apparatus as recited in claim 25, wherein said outer periphery is made from a curable silicon, and in which said impression roller includes a rigid inner form having an outer surface, and in which said outer periphery substantially covers said outer surface.

27. (currently amended): An apparatus for impressing a three-dimensional pattern into wet concrete formed by a slip form, comprising:

- an impression roller having an axis of rotation and an outer periphery, at least a portion of said outer periphery including an outer layer of material having an outwardly facing pattern side, impressed with a three-dimensional pattern;

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upper and lower arms rotatably attached to a respective upper and a respective lower end of said impression roller;

said arms extending from a support frame;

said support frame configured for coupling to a slip form machine;

said arms configured to support said roller for rotation about said axis with said outer periphery being partially depressed into an exposed side surface of the wet concrete wall emerging from said slip form, said axis of said roller being maintained substantially parallel to the exposed surface;

whereby surface engagement between said outer periphery of said impression roller and the exposed surface of the wet concrete cause said roller to rotate and impress successive portions of the wet concrete with successive portions of said three-dimensional pattern.

28. (previously presented): An apparatus as recited in claim 27, wherein said outer layer is made from a curable silicon, and in which said impression roller includes an rigid inner form having an outer surface, and in which said outer layer substantially covers said outer surface.

29. (new): An apparatus as recited in claim 25, wherein said impression roller imparts a force into the wall, the apparatus further comprising:

a second roller displaced to engage a second exposed side surface opposite said first exposed side surface of said wall, said second roller providing a substantially equal and opposite force to said force imparted by said impression roller.

30. (new): An apparatus as in claim 29, wherein the second roller has an outer periphery, at least a portion of said outer periphery impressed with a three-dimensional pattern to impress a pattern into said second exposed side surface.

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31. (new): An apparatus as recited in claim 29, wherein said impression roller imparts a force into the wall, the apparatus further comprising:

a side wall form extending downstream from said slip form assembly, said side wall form being adjacent to a second exposed side surface opposite said first exposed side surface of said wall, said side wall form providing a substantially equal and opposite force to said force imparted by said impression roller.